

Cal/Ecotox

Toxicity Data for Merriam's Kangaroo Rat (*Dipodomys merriami*)*

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| Chemical | Tox Exposure | Endpoint Type | Endpoint Description | Endpoint Value | Note | Reference |
|------------------|---|--|--|---------------------------------------|------|-----------|
| HEXACHLOROETHANE | control site and site 15 m from smoke source of fogoil and hexachloroethane | TOX-Non-Repro-Sublethal - genetic effects | mean chromosomal aberrations per cell, compared to controls (not exposed to obscurant smoke) | decrease | a | 1 |
| HEXACHLOROETHANE | control site and site 15 m from smoke source of fogoil and hexachloroethane | TOX-Non-Repro-Sublethal - genetic effects | sister chromatid exchange counts, compared to controls | no effect | b | 1 |
| METHYLPARATHION | control, 5 mg/kg bw | TOX-EXP IND - biomarkers | brain cholinesterase activity, compared to control | 18-19 % decrease | c | 2 |
| METHYLPARATHION | 0.35,56,90,143 mg/kg | TOX-MORT - dose-response data | LD50 | 97.1 mg/kg (95% CI, 42.6-178.6 mg/kg) | d | 2 |
| METHYLPARATHION | control, 5 mg/kg bw | TOX-Non-Repro-Sublethal - behavioral effects | discrimination between seeds and beads | no effect | e | 2 |

Notes

a NR; CA; NR; Species - California (R)=*Dipodomys merriami*; TOX - Chemical=67-72-1; N=3-4/group; Goldstone, Fort Irwin; Tox Exp Tech=site contamination; Tox Exp Dur=30 min.; Tox Study Dur=30 min.; Tox Stat Sig=Y

b NR; CA; NR; Species - California (R)=*Dipodomys merriami*; TOX - Chemical=67-72-1; N=3-4/group; Goldstone, Fort Irwin; Tox Exp Tech=site contamination; Tox Exp Dur=30 min.; Tox Study Dur=30 min.; Tox Stat Sig=N

c Adult; Lab; B; Species - California (R)=*Dipodomys merriami*; TOX - Chemical=298-00-0; N=2 animals; Tox Exp Tech=gavage; Tox Exp Dur=single dose; Tox Study Dur=24 h; Tox Stat Sig=N

d Adult; Lab; B; Species - California (R)=*Dipodomys merriami*; TOX - Chemical=298-00-0; TOX - Dose-Response Data Format=DR Table; N=3-4 animals/group; Tox Exp Tech=gavage; Tox Exp Dur=single dose; Tox Study Dur=24 h; Tox Stat Sig=NR

e Adult; Lab; B; Species - California (R)=*Dipodomys merriami*; TOX - Chemical=298-00-0; N=22 animals; Tox Exp Tech=gavage; Tox Exp Dur=single dose; Tox Study Dur=24 h; Tox Stat Sig=N

References

- 1 Schaeffer, D.J., Edward W. Novak, William R. Lower, Armon Yanders, Shubendar Kapila and Richard Wang. 1987. Effects of chemical smokes on flora and fauna under field and laboratory exposures. Ecotoxicol. Environ. Safety. 13:301-315.
- 2 Peterle, T. J. and R. Bentley. 1989. Effects of low OP dose on seed/bead discrimination in the kangaroo rat, *Dipodomys*. Bull. Environ. Contam. Toxicol. 43:95-100.

* Cal/EPA, OEHHA and the University of California Regents are not responsible for damages of any kind resulting from the use of or reliance on information in this report. Users are encouraged to consult the original data. Updated: February 1999.